

***This document is a translation of the original document, written in Spanish for Comisión Estatal de Servicios Públicos de Tijuana (CESPT), the water and wastewater operating agency for the municipalities of Tijuana and Playas de Rosarito, Baja California, Mexico.***

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APPENDIX P  
Master Plan Assumptions Concerning  
the Public Law 106-457

November 5, 2002. Tijuana, Baja California.

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Tijuana, Baja California. C.P. 22430

Subject: Potable Water and Wastewater Master Plan for Tijuana and Playas de Rosarito  
– United States Public Law 106-457 infrastructure analysis inclusion

Ms. Tinoco:

The purpose of this letter is to confirm the manner in which the master plan will include the United States Public Law 106-457 infrastructure analysis. The consultant is asked to include a scenario with the Public Law and a scenario without the Public Law as part of the scope of work. The manner in which to include these two scenarios has been discussed in other meetings and is presented below.

The master plan has developed 12 integral alternatives, all of which can be subject to the inclusion of the Public Law infrastructure (a scenario with the Public Law can be included in every one of these alternatives). The prioritization of the 12 alternatives, without the addition of the Public Law, based on the evaluation criteria has been proposed. Once a specific alternative has been selected, an analysis of the modification in the selected alternative for the case in which the Public Law will be implemented will be made.

The results will be presented with and without the Public Law. In this manner, the master plan will present the selected alternative for the case in which the Public Law will be implemented. The analysis will be made based on the assumptions presented in the memorandum presented to the Technical Committee, dated September 19 (attachment).

The master plan will also discuss whether there is a need for an additional 25 mgd of secondary treatment capacity for Tijuana at the Public Law facility if implemented (see Public Law 106-457, Section 804 a2.).

Beside the assumptions presented in the memorandum, it is necessary to make assumptions pertaining to the responsibility of the different cost components on the part of CESPT, given that this is not mentioned in detail in the Public Law and CESPT has not been able to define this aspect. The assumptions that will be made are:

- It will be considered that the capital costs of the treatment plant will not be responsibility of CESPT.

Hermila Tinoco  
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- It will be assumed that the costs of operation and maintenance of the plant will be divided by CESPT flows (additional flows at 1,100 l/s) and flows of other parts (flows up to 1,100 l/s).
- The flows from the pump stations and conveyance lines to the Public Law plant will be assumed as responsibility of CESPT for flows exceeding 1,100 l/s.
- The necessary effluent lines will be assumed as responsibility of CESPT when exceeding 1,100 l/s.

I await your expedited response with respect to these assumptions in order to proceed with the analysis.

Sincerely,

Enrique J. Lopez Calva  
Project Manager  
Camp Dresser & McKee Inc.

c.c.p. Evelyn Wachtel  
c.c.p. Wendi Shafir  
c.c.p. Héctor Valadez  
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c.c.p. File



## Memorandum

*To: Binaltional Technical Committee*

*From: CDM*

*Date: September 19, 2002*

*Subject: Potable Water and Wastewater Master Plan for the Municipalities of Tijuana and Playas de Rosarito – Public Law Assumptions*

For the completion of the master plan, it is necessary to define the characteristics and general operation of the plant of the Public Law for its incorporation in the alternative analysis process.

At present, the implementation of the Public Law has not been defined by the agencies involved in the implementation of the Public Law. Therefore, it is necessary to make assumptions with respect to the characteristics of this plant. These assumptions are presented below, based on the questions sent to CESPT electronically on May 24, 2002, for which CESPT has not received a response from the Mexican Section of the International Boundary and Waster Commission (CILA). CDM has decided to proceed with these assumptions, in order to continue with the development of the master plan.

1. It is assumed that only one plant will exist.
2. It is assumed that the plant will be located in the area that has been conceptually presented in the alternatives of the master plan, in the Alamar River basin.
3. If necessary for flow analysis, peak factors will be assumed for the Public Law equal to the peak factors used for the conceptual design of the other plants of the alternatives of the master plan. The existence of a daily average pumping of 1,100 l/s from the PITAR is assumed. Flows of raw-wastewater in addition to the 1,100 l/s from the international plant will be pumped in Tijuana and maximum-hour flows will be used.
4. Capacities in terms of daily average, maximum month, maximum day, and maximum hour (hydraulic, as well as organic): The Public Law establishes that the plant is no more than 50 mgd (2,200 l/s), unless the master plan determines the need for an additional 25 mgd (1,100 l/s). The plant will not exceed 3,300 l/s.

5. The assumption is made that the Public Law refers to a daily average. For a monthly maximum, daily maximum and hourly maximum, the same peak factors for the other plants in the master plan are assumed. The organic capacity is determined with the same organic flow values used in the other plants of the master plan.
6. The assumption is made that secondary treatment will be performed without nutrient removal, as defined in the "Federal Water Pollution Control Act", as established in the Public Law. It is assumed that this level of treatment is sufficient for discharge of the effluent in the San Diego ocean outfall plant.
7. Non-reused effluent disposal in the San Diego ocean outfall is assumed. The quality of the secondary level is assumed to be sufficient in the case of this plant.
8. The assumption is made that no significant demands for the effluent of this plant for non-potable reuse exist. For indirect potable reuse, it is assumed that advanced treatment (with membranes) will be necessary, as presented in the master plan alternatives. CESPT will be responsible for the costs of the advanced treatment.
9. It is assumed that the San Diego ocean outfall will be used at no cost for the first 1,100 l/s, where after additional costs will be charged if the flow exceeds 1,100 l/s.
10. It is assumed that operations begin in the year 2006.
11. It is assumed that whatever sludge produced will be the responsibility of CESPT and it will be disposed of in the same site used for sludge disposal for all other master plan new plants. Data pertaining to sludge generation from high technology lagoons, which was established as the preferred treatment process for Mexican waters treated in San Diego, will be collected.
12. Future expansion is not considered.